

Narrative

Statement of Need

Barnwell School District #19 is a small, rural district that serves approximately 800 students. Our district is the third poorest district in the state with approximately 88.8 % of our students receiving free or reduced lunch. We have only two small industries in the community and a very narrow tax base. The district has made great strides in its technology program over the years. Our three schools are wired for the internet, each have computer labs, and we have offered to our faculty and staff a wide range of technology related professional development opportunities funded through the Title I program, Title II, PDSI, lottery, and technical assistance funds. Our district's enrollment continues to shrink, we have been staggered by state budget cuts, and our families being devastated by the stagnation of the local economy. With the increasing accountability requirements and expectations of businesses and industries to employ a workforce that is more technologically proficient, a gap is being created in the district's ability to fund further technology initiatives. The Enhancing Education Through Technology (E2T2) grant would help the district close this gap.

This past year the district was awarded the Enhancing Education Through Technology competitive grant which provided students and teachers in grades 7 and 8 laptop computers and the services of a technology coach. E2T2 –Round 8 grant activities will be expanded to include Macedonia Elementary School. Macedonia Elementary serves approximately 435 students grades pre-kindergarten through six. Student achievement is of grave concern at this school. Macedonia has received an unsatisfactory rating the state report card in 2006 and 2007 and is in the Restructuring phase of school improvement under the *No Child Left Behind Act of 2001*. Test scores indicate that students are not grasping the standards necessary for academic success.

Palmetto Achievement Challenge Test- Spring 2008

	ELA	Math	Science	Social Studies
Grade 3	BB: 42.2 % B: 25.4 % P: 25.4 % A: 8.8 %	BB: 50.8 % B: 33.9 % P: 10.2 % A: 5.1 %	BB: 41.4 % B: 41.4 % P: 6.9 % A: 10.3 %	BB: 36.7 % B: 53.3% P: 6.7% A: 3.3%
Grade 4	BB: 51.6 % B: 24.2 % P: 24.2 % A: 0 %	BB: 55.6 % B: 33.3 % P: 7.9 % A: 3.2 %	BB: 50.8 % B: 28.6 % P: 12.7 % A: 7.9 %	BB: 42.9 % B: 41.3 % P: 7.9 % A: 7.9 %
Grade 5	BB: 53.6 % B: 44.6% P: 6.8% A: 1.8 %	BB: 57.9% B: 36.8% P: 3.5% A: 1.8%	BB: 89.7 % B: 10.3 % P: 0 % A: 0 %	BB: 64.3 % B: 28.6 % P: 7.1% A: 0 %
Grade 6	BB: 60.3 % B: 29.3% P: 10.3 % A: 0 %	BB: 37.7 % B: 50.8 % P: 6.6 % A: 4.9 %	BB: 64.5 % B: 25.8 % P: 9.7 % A: 0 %	BB: 30 % B: 26.7 % P: 26 % A: 23.3 %

Teacher survey's and inventories indicate extremely limited access to technological tools in the classroom. Students in grades pre-k through 5 have access to a sixty station computer lab once per week. Three thirty station laptop carts are available on a check out basis: one for grades pre-k though 1, one for grades 2 and 3, and one for grades 4, 5, and 6. These laptops are over eight years old and many do not work. Each classroom has one laptop and LDC projector for the teacher and one desktop computer for students. While the laptop and projectors are only two years old, the desktop computers are over six years old. The current level of access that the students have to technological tools enables them to take MAP assessments, participate in computer assisted instruction, or view a PowerPoint presentation or streamline video in the classroom. Students do not have the opportunity to use technology on a daily basis as a tool for self directed learning.

On-going, sustained professional development in technology integration is a desperate need at all three of the schools in our district. Approximately 83.3 % of the teachers at the elementary

school and 75 % of the teachers at the high school have achieved Level I technology proficiency. At the junior high school, where a technology coach is employed with 2008 E2T2 funds 50 % of the teachers have achieved Level III proficiency. Teacher survey responses from Macedonia Elementary indicate that 20 % never use technology in instruction, 10 % use technology occasionally, 40% weekly, and 30 % daily. At the junior high school, where the technology coach is employed, 50 % of the teachers use technology on a daily basis. Approximately 65 % of our teachers responded that they needed intensive training in how to integrate technology into instruction. Teacher surveys also indicate that students also need intensive instruction in the use of technology. Though responses indicate that 98 % of our students can identify the essential uses of technology and 99% are able to use internet resources to access information for a research paper or report, only 60 % of elementary students can identify and use key computer terms. Approximately 45 % of the elementary school students are able to demonstrate such skills as creating and printing a report for a selected database or use at least two applications in an integrated application program. E2T2 funds will enable the district to employ a technology coach with the expertise and experience to provide high quality, sustained, professional development by fostering collaborative planning, classroom coaching, and modeling lessons.

In order for our students to be competitive in the 21st century workplace, they are going to need the technological skills that exceed those of their parents and teachers. Our community has an unemployment rate of 14 %, a figure that is increasing at an alarming rate due to the closure of several manufacturing plants in the county. According to the U.S. Census Bureau, only 60 % of our population twenty-five years or older has attained more education than a high school diploma. Many of our families do not have daily access to computers or the internet to communicate with the school or to access the school or town government's website. E2T2 funds will be used to purchase laptops that will be made available to students and their families to practice technological skills, access educational and employment resources, communicate with

the school and town government via e-mail. The district will provide parent nights to orient our parents on how to use and care for the laptops and provide technology training. Our district will continue its partnership with Bamberg/Barnwell Adult Education to provide additional computer literacy training to parents and members of the community and will partner with the Blackville branch of the Aiken-Bamberg-Barnwell-Edgefield Regional Library system to provide wireless internet access to families that do not have internet access in their homes.

Project Design:

Goals and Objectives: Barnwell School District #19 will achieve three goals through the Enhancing Education Through Technology initiative:

Goal 1: To assist every student in becoming technology literate by 8th grade.

Objectives: 1.1 By May, 2010, 85 % of the students in grade 8 will achieve Level II proficiency as measured by the student E-Portfolio assessment system.

1.2 By May, 2010, 100 % of the students in grade 6 will have access to technology tools on a daily basis as measured by expenditure reports, classroom observations, and student performance on the E-Portfolio student assessment system.

Goal 2: To encourage the effective integration of technology into the instructional program.

Objectives: 2.1 By May, 2010, 100 % of the teachers in grades 3 - 8 will have access to technology tools on a daily basis as measured by expenditure reports, classroom observations, and teacher performance on the E-Portfolio teacher assessment system.

2.2 By May, 2010, 90 % of the teachers, grades 3- 8 will achieve Level III proficiency as measured by the E-Portfolio teacher assessment system.

2.3 By May, 2010, 90 % of the teachers in grades 3- 8 will integrate technology into instruction on a daily basis as measured by lesson plans, classroom observations, and teacher survey responses.

Goal 3: To improve academic achievement through the use of technology.

Objectives: 3.1 By May, 2010, 80 % of the students in grades 3-8 will show an increase of 1 Rasch Unit (RIT) band level on the Spring MAP Reading, Math, and Science Assessments as compared to the Fall, 2009 MAP Reading, Math, and Science Assessments.

3.2 By May, 2010, the percentage of students in grades 3-8 who meet standard on the English/Language Arts, Mathematics, Science, and Social Studies portions of the Palmetto Assessment of State Standards will increase by 10 percentage points.

Goal 4: To promote parent involvement and communication through the use of technology.

4.1 By May, 2010, 70 % of the parents of students in grades 3- 8 will have the knowledge and skills necessary to assist their children in achieving Level II proficiency as measured by adult education pre/post test results.

4.2 By May, 2010, 80 % of the parents of students in grades 3-8 will have accessed technological resources to enhance their children's education as measured by parent night sign-in logs, inventories, and parent check-out rosters.

Strategies and Activities:

Strategy 1: To provide teachers and students in grades 3-6 with increased access to technology tools.

E2T2 grant funds will provide one laptop computer for each student in grade six and for each teacher in grades 3-5 for a total of 76 computers. Title I funds will be used to purchase

additional laptop computers for grades 3-5. Teachers in grade 6 were provided laptop computers with E2T2-Round 7 grant funds. Students in grade 3-5 will have daily access to computers in the classroom. Students in grade 6 will have access to the computers in the classroom and for use at home through a check out program. Students will use the computers in a variety of activities such as conducting research, creating and publishing documents and multimedia presentations, collecting data and working on the Compass Learning program. The emphasis on the use of computers will focus on higher order thinking skills rather than drill and practice. Wenglinsky (1998) found that using computers to teach low order thinking skills had a negative impact on student achievement, while using computers to solve simulations saw their students' math scores increase significantly. Papanastasiou, Zemblyas, & Vrasidas (2003) found that it is not the computer use itself that has a positive or negative effect on achievement of students, but the way in which computers are used.

Strategy 2: Provide teachers, students, and parents with the knowledge and skills necessary to use technology effectively.

Staff development will be provided to teachers on a regular, on-going basis by the Technology Coach. Kanaya & Light (2005) points out that teachers need in-depth, sustained assistance not only in the use of the technology, but in their efforts to integrate the technology into the curriculum. The Technology Coach will work with the English/Language Arts, math, science, and social studies teachers at Macedonia Elementary (grades 3-6) in addition to working with the teachers at Blackville-Hilda Junior High School (grades 7 and 8). E2T2 formula grant and Title II funds will be used to provide a Tech Camp during the summer to provide the six teachers from Macedonia the skills necessary to attain Level III proficiency and provide those teachers in grades 6-8 additional training, if necessary. During the school year the technology coach will work in conjunction with the curriculum specialist, math coach, and science coach to ensure that technology is integrated into the curriculum and plan ongoing professional development. The

tech coach will also work closely with the teachers to integrate technology into their daily instruction. The coach will collaborate with the teachers in planning lessons and provide support by modeling lessons, observing classes and providing feedback.

The teachers will be primarily responsible for providing daily instruction to the students in the use of technology as it relates to academic learning. The coach will provide support to the teachers by teaching special skills to the students.

Parents will have opportunities for technology instruction through quarterly Parent Nights, in which the technology coach and selected teachers will present selected topics/skills as they relate to daily instruction. Parents will also receive perfunctory training in the use of the laptop computers as part of the orientation for the laptop computer program. E2T2 2008-2009 formula grant funds were used to purchase laptops for mini-lab for parents in the parent resource room at Macedonia Elementary School in order for them to access educational resources and practice learned skills. Additional opportunities for training will be provided to parents by Barnwell/Bamberg Adult Education in the form of a six week computer literacy course.

Strategy 3: To provide students with extended learning opportunities to raise academic achievement.

The ultimate goal of any educational initiative is to raise student achievement. Enhancing Education Through Technology funds will give targeted students extended learning opportunities during the school day and after school hours. Students in grade 6 will be able to check out laptop computers to take home after school and on the weekends. This will allow students to conduct internet research, create and publish documents and multimedia presentations, and work on learning programs. All of the laptops will have access to the Compass Learning and Orchard learning programs. These software programs assess student's academic skills in English/Language Arts, Math, and Science and prescribe skill trees for the students to work on. With each student having access to a laptop computer after school hours,

as well as the school day, students can work at their own pace without the restrictions of computer lab schedules. For students who do not have access to the internet at home, the district has partnered with the Blackville branch of the Aiken-Bamberg-Barnwell-Edgefield Regional Library System to provide wireless internet access at their facility during the weekends and after school hours. Students in grades 3-5 will have access to laptops during the school day and during the Title I extended day program. The Blackville branch library has approximately twenty desktop computers that have internet access that can be utilized after school hours. Compass Learning is an internet based program, therefore students would be able to access the program from any computer that is wired to the internet. Coley (1997) points out that students who have access to computers at home and at school have shown an increase in writing skills, a better understanding of math, greater problem solving and critical thinking skills, the ability to teach others, greater self confidence and self esteem, and more confidence with computer skills.

Strategy 4: To provide parents with opportunities to become active partners with the school in the education of their children.

Cotton and Wikelund (2001) point out that research overwhelmingly demonstrates that parent involvement in children's learning is positively related to achievement. The more intensively parents are involved in their children's learning; the more beneficial are the academic effects. As part of the Enhancing Education Through Technology initiative, in conjunction with other funding sources, parents will be given a variety of opportunities to use technology to communicate with the school and assist their children in their education. As mentioned in the previous sections, parents will have opportunities for technology training during the quarterly Parent Nights and the six week computer literacy course provided by Barnwell/Bamberg adult education. Parents will be allowed to access additional technological resources, practice skills, access the district website, and communicate with the teachers and administration of the schools via e-mail

utilizing computers in the parent resource room at Macedonia Elementary and the Blackville Public Library.

Management and Sustainability:

The district has demonstrated effectiveness in managing grant programs. It has received E2T2 grants from 1997 until 2002. Last year, we received and are currently managing Round 7 of the E2T2 grant. In addition, the district has successfully implemented a 21st Century grant at Macedonia Elementary School. The day to day responsibilities of managing the grant will be administered by David Corder, who will serve as the project director. Fifteen percent of his time will be spent in oversight, management, reporting, and other responsibilities related to the successful implementation of the Enhancing Education Through Technology initiative. Mr. Corder serves as the district's Director of Federal Programs (Please see appendix B for job summary).

A full-time Technology Coach has been hired with 100 % of her time dedicated to the initiative. The coach is a certified teacher that has attained Level IV technology proficiency, based upon the e-portfolio system. The coach will work directly with seventeen teachers in grades 3-8, students, and parents to provide technology instruction and will collaborate with the district curriculum facilitator, the science coach, the math coach, and the curriculum specialists at Macedonia Elementary School and Blackville-Hilda Junior High School (Please reference appendix C for job description).

The district curriculum facilitator, Ms. Rosanne Montjoy will provide content support. Thirty-three percent of her time is spent at Macedonia Elementary School and Thirty-three percent of her time is spent at Blackville-Hilda Junior High School (Please reference Appendix D for job description).

The principal and assistant principal of Macedonia Elementary School, principal of Blackville-Hilda Junior High School, and the ADEPT coordinator will be available to conduct classroom

observations and help coordinate professional development efforts. The district Director of Technology will ensure that equipment is maintained. The district has in place a technology plan that includes an Internet Acceptable Use Policy with a certification form that parents and students must sign to allow the students to use the Internet. The district has in place an E2T2 Laptop Program Acceptable Use Policy and Student Contract that outlines student/family care of the laptops (see Appendix E).

The district will coordinate federal, state, and local funds to enhance E2T2 funds. Title I funds are targeted for Macedonia Elementary School and Blackville-Hilda High School and provides support for technology integration and professional development. Title II and PDSI funds provide professional development for the three schools in the district and ATA funds help support technology at Macedonia Elementary School and Blackville-Hilda Junior High School. Opportunities for parent training will be provided by the technology coach in the form of a parent orientation for the laptop checkout program at the beginning of 2009-2010. Parent training in using technology will be conducted quarterly at Parent Nights with the assistance of the math and science coaches and curriculum specialist. Parent will also receive computer literacy training through a six week course provided by Barnwell/Bamberg Adult Education.

Staff members will receive training provided by the technology coach. A three day Tech Camp will be provided during the summer as well as on-going professional development throughout the year.

Activities will be concentrated at Macedonia Elementary School, which meet state requirements concerning health and safety.

Information about the Enhancing Education Through Technology initiative will be made available to the public through the district website and the local newspaper.

The district will use Title I, Title II, PDSI, and TA funds to sustain the E2T2 initiative beyond the grant period, recognizing the importance of coaches as an effective method of delivering high

quality professional development. State TA and lottery funds will be utilized to ensure that equipment is maintained and upgrades as needed.

Evaluation and Dissemination:

Evaluation:

An evaluation will be conducted based upon the four goals of the E2T2 initiative. The evaluation will be an imbedded process for individual and program benchmarking to provide the Technology Coach, Curriculum facilitator, Curriculum specialist, teachers and students information of the direction in which the program should progress.

Goals	Data to be Collected	Benchmark/Progress Monitoring	Data Analysis
To assist every student in becoming technology literate by 8 th grade.	Student e-portfolio data, Teacher Assessments, Technology Coach Assessments, Check out logs	Quarterly Interim and quarterly reports Quarterly Quarterly	Teachers and Technology Coach will meet twice each quarter to review data.
To encourage the effective integration of technology into the instructional program.	Lesson Plans, Classroom Observations, Teacher e-portfolio data	Weekly Quarterly	Technology Coach, Curriculum facilitator, and Project director will meet quarterly to review data.
To improve academic achievement through the use of technology.	Student classroom achievement in ELA, Math, Science, and Social Studies MAP Results PASS results	Quarterly Fall,2009 results compared to Spring, 2010 results Spring 2008 PACT results compared to the 2010 PASS results.	Teachers, Technology Coach, Principal, and Curriculum facilitator will meet quarterly to review data.
To promote parent involvement and communication through the use of technology.	Computer literacy course pre/post test results Parent night sign-in rosters and evaluations	Annually Quarterly Quarterly Bi-annually	The principal, technology coach, and project director will meet quarterly to review data.

	Parent check-out rosters		
	Parent survey results		

Dissemination:

Information about the project will be disseminated through Macedonia Elementary School's newsletters, on the district website, articles in the local newspaper, PTSO meetings, and state and national conferences.

 <p>South Carolina Department of Education Together, we can.</p>	<p>Enhancing Education Through Technology 2009–2010 Subgrant Application</p> <p>Budget Form</p>
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Name of Applicant Barnwell #19

Budget Form

Object Category	Instructional Series (100)	Support Services Total (200)	Total
Personnel (Salaries) (100)	\$ 53,000.00		\$ 53,000.00
Employee Benefits (200)	\$ 15,587.00		\$ 15,587.00
Purchased Services (300)			
Supplies and Materials (400)	\$ 81,413.00		\$ 81,413.00
Capital Outlay (500)			
Other (600)			
Total	\$ 150,000.00		\$ 150,000.00

Budget Narrative:

Account Code 100: Salaries

Type of Technology Activity: Assignment of Technology Coach

Full time salary for school technology coach

Projected Total: \$ 53,000.00

Explanation: The E2T2 grant guidelines require that a School Technology Coach be appointed. The technology coach will be responsible for training teachers on site, attending all required meeting, and assisting teachers with technology integrated lessons.

Account Code 200: Benefits

Type of Technology Activity: Assignment of Technology Coach

Projected Total: \$ 15,587.00

Explanation: FICA, retirement, and health benefits for the Technology Coach

Account Code 400: Supplies and Materials

Type of Technology Activity: 75 laptop computers- \$ 81,413.00

Projected Total: \$ 81,413.00

Explanation: Laptop computers will be used for students in grade 6 to practice technological skills and work on projects at school and home. Laptops will also be used by teachers in grades 3-5 to integrate technology into instruction.